

CLAIMS:

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent is:

1           1. A method for providing a high fidelity  
2 simulation of a client/server system including a server  
3 and a plurality of locally attached intelligent client  
4 workstations, the method comprising:

5           simulating at level 2 of a protocol stack by  
6 formulating one or more client requests to have unique  
7 client identifiers incorporated at the level 2 of a  
8 protocol stack before transmitting said one or more  
9 client requests on a communications channel having a  
10 routing access to a server for servicing said one or more  
11 client requests.

1           2. A method for providing a high fidelity  
2 simulation of remotely attached intelligent workstations,  
3 the method comprising:

4           simulating at level 3 of a protocol stack by  
5 formulating one or more client requests to have unique  
6 client identifiers and a network address associated with  
7 the unique client identifiers incorporated at the level 3  
8 of a protocol stack before transmitting said one or more  
9 client requests on a communications channel having a  
10 routing access to a server for servicing said one or more  
11 client requests.

1           3. The method as claimed in claim 1, wherein the  
2 step of simulating at level 2 of the protocol stack  
3 includes:

4           formulating data to emulate a client request to  
5           submit to the server;  
6           padding the formulated data with header data that  
7           conforms to communications protocol used by the server  
8           receiving the client request; and  
9           producing one or more level 2 data frames from the  
10          padded data by inserting a unique client address into the  
11          padded data, the unique client address representing a  
12          unique client workstation that submitted the client  
13          request.

1           4. The method as claimed in claim 3, wherein the  
2           method further includes:  
3           placing said one or more level 2 data frames on the  
4           communications channel.

1           5. The method as claimed in claim 3, wherein the  
2           method further includes:  
3           maintaining independent client states for each  
4           client request submitted by said unique client  
5           workstation.

1           6. The method as claimed in claim 5, wherein the  
2           step of maintaining independent client states further  
3           includes:  
4           emulating a client in an idle state to trigger a  
5           timeout event.

1           7. The method as claimed in claim 3, wherein the  
2           method further includes:  
3           maintaining independent client states for each

4 client request submitted by a plurality of said unique  
5 client workstation.

1 8. The method as claimed in claim 3, the method  
2 further including:

3 incorporating static instructions that emulate user  
4 actions; and

5 formulating data to emulate a client request to  
6 submit to a server in response to the incorporated static  
7 instructions.

1 9. The method as claimed in claim 3, the method  
2 further including:

3 dynamically loading instructions that emulate user  
4 actions; and

5 formulating data to emulate a client request to  
6 submit to a server in response to the dynamically loaded  
7 instructions.

1 10. The method as claimed in claim 3, the method  
2 further including:

3 receiving operator inputs at a workstation; and

4 formulating data to emulate a client request to  
5 submit to a server in response to the received operator  
6 inputs.

1 11. The method as claimed in claim 1, wherein the  
2 communications channel includes a local area network  
3 (LAN).

1 12. The method as claimed in claim 1, wherein the  
2 communications channel includes a physical communications

3 device.

1 13. The method as claimed in claim 1, wherein the  
2 communications channel includes an input/output buffer  
3 internal to the server.

1 14. The method as claimed in claim 2, wherein the  
2 step of simulating at level 3 of the protocol stack  
3 includes:

4 formulating data to emulate a client request to  
5 submit to the server;

6 padding the formulated data with header data that  
7 conforms to communications protocol used by the server  
8 receiving the client request; and

9 producing one or more level 3 data frames from the  
10 padded data by inserting a unique client address and a  
11 network address associated the unique client address into  
12 the padded data, the unique client address representing a  
13 unique client workstation that submitted the client  
14 request.

1 15. A program storage device readable by machine,  
2 tangibly embodying a program of instructions executable  
3 by the machine to perform the method steps of providing a  
4 high fidelity simulation of locally attached intelligent  
5 workstations, the method steps comprising:

6 simulating at level 2 of a protocol stack by  
7 formulating one or more client requests to have unique  
8 client identifiers incorporated at the level 2 of a  
9 protocol stack before transmitting said one or more  
10 client requests on a communications channel having a

11 routing access to a server for servicing said one or more  
12 client requests.

1 16. A program storage device readable by machine,  
2 tangibly embodying a program of instructions executable  
3 by the machine to perform the method steps of providing a  
4 high fidelity simulation of remotely attached intelligent  
5 workstations, the method steps comprising:

6 simulating at level 3 of a protocol stack by  
7 formulating one or more client requests to have unique  
8 client identifiers and a network address associated with  
9 the unique client identifiers incorporated at the level 3  
10 of a protocol stack before transmitting said one or more  
11 client requests on a communications channel having a  
12 routing access to a server for servicing said one or more  
13 client requests.

1 17. An apparatus for providing a high fidelity  
2 simulation of a client/server system including a server  
3 and a plurality of locally attached intelligent client  
4 workstations, the apparatus comprising:

5 a server system under test receiving one or more  
6 packets of data;

7 a simulator that inserts a unique client identifier  
8 to said one or more packets of data at level 2 of a  
9 protocol stack, the unique client identifier representing  
10 a unique client workstation; and

11 a communication channel interconnecting the server  
12 system and the simulator, the simulator placing said one  
13 or more packets of data on the communication channel for  
14 transmission.